

Claims

[c1]

What is claimed is:

1. An interface card used on a computer, the computer comprising a housing and a first connection port positioned on the housing, the interface card comprising:

- a second connection port seperably connected to the first connection port for receiving data transmitted from the computer;
- an access control circuit electrically connected to the second connection port for converting the data transmitted from the second connection port into first format data and second format data;
- a wireless transmission module electrically connected to the access circuit for modulating the first format data into a transmission signal; and
- a network connection module comprising:
 - an antenna circuit connected to the wireless transmission module for converting the transmission signal into a first network signal transmitted via wireless transmission so that the first network signal is transmitted to a wireless network system;
 - a connecting circuit connected to the access control circuit for converting the second format data into a second network signal; and
 - a network transmission line connected to the connecting circuit for transmitting the second network signal to a wire network system.

[c2]

2. The interface card of claim 1 wherein the antenna circuit is capable of receiving signals transmitted from the wireless network system, and demodulates the received signals into network packet data so that the access control circuit is capable of converting the network packet data into corresponding data.

[c3]

3. The interface card of claim 1 wherein the connecting circuit is capable of receiving signals transmitted from the wire network system, and demodulates the received signal into network packet data so that the access control circuit is capable of converting the network packet data into corresponding data.

[c4]

4. The interface card of claim 1 further comprising a non-volatile memory for

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storing information required by the access control circuit.

- [c5] 5. The interface card of claim 1 further comprising a volatile memory for storing information required by the access control circuit.
- [c6] 6. The interface card of claim 1 wherein the network connection module is separately connected to the access control circuit.
- [c7] 7. The interface card of claim 1 wherein the antenna circuit is separately connected to the network connection module.
- [c8] 8. The interface card of claim 1 wherein the first format data complies with a specification of IEEE 802.11.
- [c9] 9. The interface card of claim 1 wherein the second format data complies with a specification of IEEE 802.3.
- [c10] 10. The interface card of claim 1 wherein the access control circuit attaches a header to the data transmitted from the second connection port for generating the first format data and second format data.
- [c11] 11. The interface card of claim 10 wherein the header comprises physical address information of the interface card.
- [c12] 12. The interface card of claim 1 wherein the access control circuit attaches a checksum to the data transmitted from the second connection port for generating the first format data and second format data.